

Amendments to the Specification

Please replace the paragraph beginning at page 6, line 23, with the following rewritten paragraph:

The shape graph 250 contains metadata which maintains associations between regions based on object references by containing nodes representing regions and directed edges between the nodes which demonstrate associations between regions. In one implementation, the shape graph edges represent reference names. As an example, the shape graph 250 could contain information that any object referenced by a field called “age” in an object in region α will be contained in region β by containing α and β nodes connected by $[[a]]$ an “age” edge. In alternate implementations, shape graphs may associate regions by different or additional information, such as object type, level of protection of the reference, or by utilizing unique field identifiers. In one implementation shape graphs are maintained as data structures describing nodes and edges. In alternate implementations, different data structures may be used, as long as the structures comprise metadata which maintains associations between regions.